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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/699,683 | 11/04/2003 | Robert C. Brunham | 1038-1273 MIS:ah | 2991 |

7590 05/25/2007

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| EXAMINER | |
|---|---|
| PORTNER, VIRGINIA ALLEN | |
| ART UNIT | PAPER NUMBER |
| 1645 | |
| MAIL DATE | DELIVERY MODE |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| **Advisory Action Before the Filing of an Appeal Brief** | **Application No.** 10/699,683 | **Applicant(s)** BRUNHAM ET AL. | |
|---|---|---|---|
| | **Examiner** Ginny Portner | **Art Unit** 1645 | |

***--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --***

THE REPLY FILED 27 April 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
   b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on *27 April 2007*. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because:

Applicants Remarks assert that the guidance and teaching of Murdin et al (US Pat. 6,693,087 or 6,686,339) in light of WO92/11361 is only general in nature with respect to bacterial membrane structures from Chlamydia, and '087 is directed to Chlamydia POMP91A protein, and ":339 is directed to inclusion membrane protein C, while the instantly claimed invention is directed to MOMP vaccine vectors. The specific nucleic molecules of the applied prior art encode Chlamydia proteins that are not MOMP. Additionally, Applicant's remarks states that the '087 and '339 documents do not suggest the replacement of the POMP91A or inclusion membrane protein C coding sequences with a nucleic acid encoding MOMP.

In response to Applicant's remarks, it is the position of the examiner that at no time were the prior art references asserted to teach the replacement of either of POMP91 or the inclusion membrane protein C coding sequences with the coding sequence for a Chlamydia MOMP polypeptide. but that both references teach a combination of two or more Chlamydia coding sequence expressed in a vaccine vector, and teach MOMP Chlamydia polypeptides are known to be encoded by allelic variant sequences (see '087, col. 8, lines 14-22) that are able to induce cross strain antibody binding that neutralize infective Chlamydia (see'087, col. 8, lines 16-22 and '087, col. 12, lines 32-47, '087, col. 12, lines 49-54) . Both '087 and '339 teach, suggest and provide guidance for the formulation of vaccine vectors for the expression of Chlamydia antigens in a mammalian cell, wherein the vaccine vector is an attenuated Salmonella strain, under the control of a cytomegalo virus promoter (see '087, col. l4, lines 33-34) the vaccine vector expressing one or more antigens("at least one additional" Chlamydial antigen) in addition to their specific nucleic acids.

The suggestion to include an additional antigen is clearly taught and suggested.

MOMP is taught to be encoded by a polynucleotide that encodes allelic varriant polypeptides (see '087, col. 8, lines 14-22) that are able to induce cross-strain neutralizing antibodies; clearly this is a suggestion to select a coding sequence for MOMP to be in combination (at least one additional) with the specific nucleic acid molecules claimed in the two applied references. The motivation to combine MOMP with the specific nucleic acid molecule of each reference is a reasonable expectation of success of expressing and inducing neutralizing antibodies that reduce or prevent infectivity by Chlamydia in a host because each applied reference teaches that MOMP polypeptides induce neutralizing antibodies and the specific nucleics molecules (POMP and inclusion membrane protein C) are additional polypeptides expressed on the surface of Chlamydia that would serve to induce antibodies that would serve to inhibit contact of Chlamydia with host cell receptors, thus providing additional anti-infective activity in a host.

The sequence alignments provided by Applicant do not provide any evidence that teaches away from the fact that both applied references describe, teach, suggest and provide guidence for the formulation of vaccine vectors that express more than one Chlamydia antigen in a mammalian cell, and differences in sequences between the proteins does not negate this guidance and teaching, in fact it provides support for the fact that Chlamydia produces different antigens that need to be combined into a vaccine vector to neutralize the more than one membrane associated antigen that can serve as a target for prevening and treating Chlamydia infection.

The claimed invention is obvious over Murdin et al al (US Pat. 6,693,087 or 6,686,339) in light of WO92/11361.

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PRIMARY EXAMINER

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